

In The Claims:

1. (Currently Amended) A rollover control system for an automotive vehicle comprising:

an active suspension having an independently adjustable unloading side and a independently adjustable loading side;

a rollover sensor generating a rollover signal in response to for detecting an imminent rollover of the vehicle; and

a controller coupled to said rollover sensor for controlling the active suspension to generate a restoring torque in response to the rollover signal.

2. (Original) A rollover control system as recited in claim 1 wherein said controller controls the loading side to a loaded condition and controls the unloading side to an unloaded condition to provide the restoring torque.

3. (Original) A rollover control system as recited in claim 1 wherein said controller controls the loading side to a loaded condition and simultaneously controls the unloading side to an unloaded condition to provide the restoring torque.

4. (Original) A rollover control system as recited in claim 1 wherein said rollover sensor comprises a speed sensor generating a first signal corresponding to wheel speed of the vehicle.

5. (Original) A rollover control system as recited in claim 1 wherein said rollover sensor is selected from the group of a speed sensor, a lateral acceleration sensor, a roll rate sensor, a yaw rate sensor and a longitudinal acceleration sensor.

6. (Original) A rollover control system as recited in claim 1 wherein said rollover sensor is selected from the group of a speed sensor, a lateral acceleration sensor, a roll rate sensor, a yaw rate sensor and a steering wheel angle sensor.

7. (Original) A rollover control system as recited in claim 1 further comprising a sensor selected from the group of a steering angle sensor, acceleration sensor and a pitch rate sensor.

8. (Previously Presented) A rollover control system as recited in claim 1 wherein said controller determines vehicle speed at a center of gravity of the vehicle in response to a steering angle from a steering sensor.

9. (Original) A rollover control system as recited in claim 1 further comprising a brake controller coupled to said controller, said brake controller controlling front brake force and rear brake force in response to said rollover signal.

10. (Previously Presented) A rollover control system as recited in claim 9 wherein said controller changes the restoring torque by changing [[the]] a steering angle factor in combination with a brake force distribution.

11. (Previously Presented) A rollover control system as recited in claim 1 wherein said controller changes the restoring torque by controlling steered wheels.

12. (Currently Amended) A method of controlling rollover stability of a vehicle having an active suspension having a first side suspension and a second side suspension comprising the steps of:

sensing imminent rollover of the vehicle and generating a rollover signal in response thereto to a rollover signal;

generating a restoring torque in response to the rollover signal by controlling the active suspension.

13. (Original) A method as recited in claim 12 wherein the step of generating a restoring torque comprises unloading the first side suspension.

14. (Original) A method as recited in claim 12 wherein the step of generating a restoring torque comprises loading the second side suspension corresponding to the loading side suspension.

15. (Original) A method as recited in claim 12 wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension and a brake force distribution.

16. (Original) A method as recited in claim 12 wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension and a steering angle.

17. (Original) A method as recited in claim 12 wherein the step of generating a restoring torque comprises simultaneously unloading the first side suspension and loading the second side suspension corresponding to the loading side suspension.

18. (Currently Amended) A method of controlling rollover stability of a vehicle having a first side suspension and a second side suspension comprising the steps of:

sensing imminent rollover of the vehicle and generating a rollover signal in response thereto to a rollover signal;

determining a loading side and an unloading side of the vehicle in response to the rollover signal;

unloading the first side suspension corresponding to the unloading side suspension;

loading the second side suspension corresponding to the loading side suspension;

generating a restoring torque in response to the steps of unloading and loading to counter the imminent rollover.

19. (Original) A method as recited in claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle of the vehicle.

20. (Original) A method as recited in claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a brake force distribution.

21. (Previously Presented) A method as recited in claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle factor in combination with a brake force distribution.

22. (Original) A method as recited in claim 18 wherein the steps of loading and unloading are performed simultaneously.